Claims:

1. A method of performing video image decoding comprising:

downsampling a compressed video image in the frequency domain;

inverse transforming the downsampled video image; and

performing motion compensation for the downsampled image in the spatial domain.

2. The method of claim 1, wherein the compressed video image in the frequency domain comprises a discrete cosine transform (DCT) image.

3. The method of claim 2, wherein the DCT image is stored as a DCT image that complies with an MPEG specification.

4. The method of claim 3, wherein the DCT image is stored as a frame type image.

5. The method of claim 4, wherein the motion compensation data signals are stored as frame prediction type motion compensation.

6. The method of claim 3, wherein the DCT image is stored as a field type image.

7. The method of claim 6, wherein the motion compensation data signals are stored as field prediction type motion compensation.

8. The method of claim 1, and further comprising displaying the downsampled spatial image so that resulting non-uniform vertical spacing of data signal lines in the downsampled spatial image appear substantially uniform on a computer monitor.

9. The method of claim 1, wherein the downsampling is performed using an integer ratio.

10. The method of claim 1, wherein performing motion compensation comprises scaling motion vectors in accordance with the downsamping ratio.

11. The method of claim 10, wherein motion vector scaling comprises implementing an interpolation operation.

12. The method of claim 11, wherein motion vector scaling comprises implementing a bilinear interpolation operation.

13. The method of claim 12, wherein the bilinear interpolation operation is implemented on 3D pipeline hardware.

14. The method of claim 1, wherein downsampling comprises implementing a linear filter as a bilinear interpolation operation.

15. The method of claim 14, wherein the bilinear interpolation operation is implemented on 3D pipeline hardware.

16. A method of performing video image decoding comprising:

inverse transforming a compressed video image;

downsamping the inverse transformed image in the spatial domain; and

performing motion compensation for the downsampled image in the spatial domain.

17. The method of claim 16, wherein the compressed video image comprises a discrete cosine

transform (DCT) image.

18. The method of claim 17, wherein the DCT image is stored as a DCT image that complies with an MPEG specification.

19. The method of claim 18, wherein the DCT image comprises macroblocks stored as frame macroblocks and macroblocks stored as field macroblocks.

20 The method of claim 19, and further comprising: converting the frame macroblocks to field macroblocks prior to downsampling in the spatial domain.

21. The method of claim 19, wherein the motion compensation data signals are stored as field prediction type motion compensation.

22. The method of claim 16, wherein performing motion compensation comprises scaling motion vectors in accordance with a downscaling ratio.

23. The method of claim 22, wherein motion vector scaling comprises implementing an interpolation operation.

24. The method of claim 23, wherein motion vector scaling comprises implementing a bilinear interpolation operation.

25. The method of claim 24, wherein the bilinear interpolation operation is implemented on 3D pipeline hardware.

26. The method of claim 16, wherein downsampling comprises implementing a linear filter as a

bilinear interpolation operation.

27. The method of claim 26, wherein the bilinear interpolation operation is implemented on 3D pipeline hardware.

28. An article comprising: a storage medium, having stored thereon instructions, that when executed by a platform, result in the following:

downsampling a compressed video image in the frequency domain;

inverse transforming the downsampled video image; and

performing motion compensation for the downsampled image in the spatial domain.

29. The article of claim 28, wherein the instructions, when executed further result in the compressed video image in the frequency domain comprising a discrete cosine transform (DCT) image.

30. The article of claim 29, wherein the instructions, when executed, further result in the DCT image being stored as a DCT image that complies with an MPEG specification.

31. The article of claim 28, wherein the instructions, when executed, further result in: displaying the downsampled spatial image so that resulting non-uniform vertical spacing of data signal lines in the downsampled spatial image appear substantially uniform on a computer monitor.

32. An article comprising: a storage medium, having stored thereon instructions, that when executed by a platform, result in the following:

inverse transforming a compressed video image;

downsamping the inverse transformed image in the spatial domain; and

performing motion compensation for the downsampled image in the spatial domain.

33. The article of claim 32, wherein the instructions, when executed further result in the compressed video image in the frequency domain comprising a discrete cosine transform (DCT) image.

34. The article of claim 33, wherein the instructions, when executed, further result in the DCT image being stored as a DCT image that complies with an MPEG specification.